

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Original) An alkaloid formulation comprising the reaction product of one or more alkaloids with one or more phosphate derivatives of one or more electron transfer agents.
2. (Previously presented) The alkaloid formulation of claim 1, wherein the one or more phosphate derivatives is a phosphate derivative of tocopherol.
3. (Previously presented) The alkaloid formulation of claim 1, wherein the formulation is a topical formulation.
4. (Previously presented) The alkaloid formulation of claim 1, wherein the formulation is an oral formulation.
5. (Previously presented) The alkaloid formulation of claim 4, further comprising an enteric coating.
6. (Previously presented) The alkaloid formulation of claim 4, wherein the formulation is selected from the group consisting of tablets, powders, chewable tablets, capsules, oral suspensions, suspensions, emulsions or fluids, children's formulations, enteral feeds, nutraceuticals, and functional foods.
7. (Previously presented) The alkaloid formulation of claim 1, wherein the formulation is a buccal formulation.

8. (Previously presented) The alkaloid formulation of claim 1, wherein the electron transfer agent is selected from the group consisting of hydroxyl chromans; quinols being the reduced forms of vitamin K1 and ubiquinone; hydroxy carotenoids; calciferol; ascorbic acid and mixtures thereof.

9. (Previously presented) The alkaloid formulation of claim 8, wherein the electron transfer agent is selected from the group consisting of tocopherol and other tocots, retinol, vitamin K1 and mixtures thereof.

10. (Previously presented) The alkaloid formulation of claim 9, wherein the electron transfer agent is selected from the group consisting of the tocots and mixtures thereof.

11. (Previously presented) The alkaloid formulation of claim 10, wherein the electron transfer agent is α -tocopherol.

12. (Previously presented) The alkaloid formulation of claim 11, wherein the one or more phosphate derivatives of one or more electron transfer agents is selected from the group consisting of mono-tocopherol phosphate; di-tocopherol phosphate; and mixtures thereof.

13. (Previously presented) The alkaloid formulation of claim 12, wherein the one or more phosphate derivatives of one or more electron transfer agents is a mixture of mono-tocopherol phosphate and di-tocopherol phosphate.

14. (Previously presented) The alkaloid formulation of claim 1, wherein the one or more phosphate derivatives of one or more electron transfer agents is a phosphatide.

15. (Previously presented) The alkaloid formulation of claim 1, wherein the one or more alkaloids are selected from the group consisting of tertiary amines which are alicyclic with the nitrogen atom as a common member of three rings; are cyclic where the nitrogen is incorporated

into a single ring and alkylated; or have no cyclic structure incorporating the nitrogen; and mixtures thereof.

16. (Currently amended) The alkaloid formulation of claim 15, wherein the one or more alkaloids are selected from the group consisting of atropine, quinine, opioids, fentanyl, nicotine, fenspiride, flurazepan, morphine and codeine.

17. (Currently amended) The alkaloid formulation of claim 1, wherein the one or more alkaloids is ~~the alkaloid~~ atropine.

18. (Currently amended) The alkaloid formulation of claim 1, wherein the one or more alkaloids is ~~the alkaloid~~ morphine.

19.-20. (Cancelled)

21. (Original) A pharmaceutical composition comprising the reaction product of one or more alkaloids with one or more phosphate derivatives of one or more electron transfer agents.

22. (Previously presented) The pharmaceutical composition of claim 21, wherein the electron transfer agent is tocopherol.

23. (Previously presented) The alkaloid formulation of claim 8, wherein the hydroxyl chromans is an alpha, beta, gamma or delta tocol present in enantiomeric or racemic forms.

24. (Previously presented) The alkaloid formulation of claim 8, wherein the hydroxyl carotenoid is a retinol.